

CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

26 July, 1990

RECEIVED
JUL 30 1990

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

DIVISION OF
OIL, GAS & MINING

Ref: Application for Permit to Drill
Navajo Canyon 331-1 Well, San Juan County, Utah

Gentlemen

Attached for your examination and approval is the original and two copies of an Application for Permit to Drill the Navajo Canyon 331 Well No. 1 in San Juan County, Utah. This well will be drilled as part of an ongoing exploration program.

The location for this well falls outside the guidelines for the State of Utah spacing requirements. However, the location has been sited so as to allow the well bore to penetrate geological structures which have been identified by seismic interpretation. We therefore apply for an exception to the General State Spacing requirements. Chuska Energy controls the acreage surrounding the proposed site, as indicated on the attached land plat.

Please advise if you require additional information concerning this application. Chuska will greatly appreciate your prompt consideration.

Sincerely,

Larry G. Sessions

Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP\NAVCANYN.331\APDCOVER

encl.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

RECEIVED
JUL 30 1990

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work **DRILL** ☒ **DEEPEN** ☐ **PLUG BACK** ☐ **OIL, GAS & MINING**

b. Type of Well
Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone ☐

2. Name of Operator
Chuska Energy Company

3. Address of Operator
P.O. Box 780, Farmington, New Mexico 87499

4. Location of Well (Report location clearly and in accordance with any state requirements.)*
At Surface **1420' FSL, 950' FEL** **NESE**

At proposed prod. zone **Same**

5. Well Designation and Serial No.
NOG 8702-1116

6. If Indian, Allottee or Tribe Name
Navajo Tribal

7. Unit Agreement Name

8. Farm or Lease Name
Navajo Canyon 331

9. Well No.
1

10. Field and Pool, or Wildcat
Wildcat 001

11. QQ, Sec., T., R., N., or Blk. and Survey or Area
S33 T39S R25E

12. County or Parish
San Juan

13. State
Utah

14. Distance in miles and direction from nearest town or post office*

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

16. No. of acres in lease

17. No. of acres assigned to this well

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

19. Proposed depth
6,007' GR AKAH

20. Rotary or cable tools
Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
4,867' GR

22. Approx. date work will start*
10-15-90

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4"	8 5/8"	24 lb	500'	371 sx 'G' + 2% CaCl ₂
7 7/8"	5 1/2"	15.5 lb	6,007'	649 sx 'G', 65:35 Poz + 6% Gel

Refer to attached 10-Point Drilling Plan etc.

OIL AND GAS	
DFN	RJF
2 JPB	GLH
DIS	SLS
1-TAS	
2-TAS	
5-TAS	
6	MICROFILM
7	FILE

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. I hereby certify that this report is true and complete to the best of my knowledge.

Signed *Christopher W. Hill* Title Petroleum Engineer Date 26 July, 1990

(This space for Federal or State office use)

API NO. 43-037-31546

Approval Date

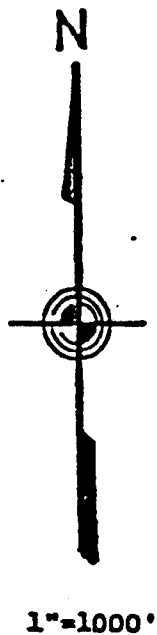
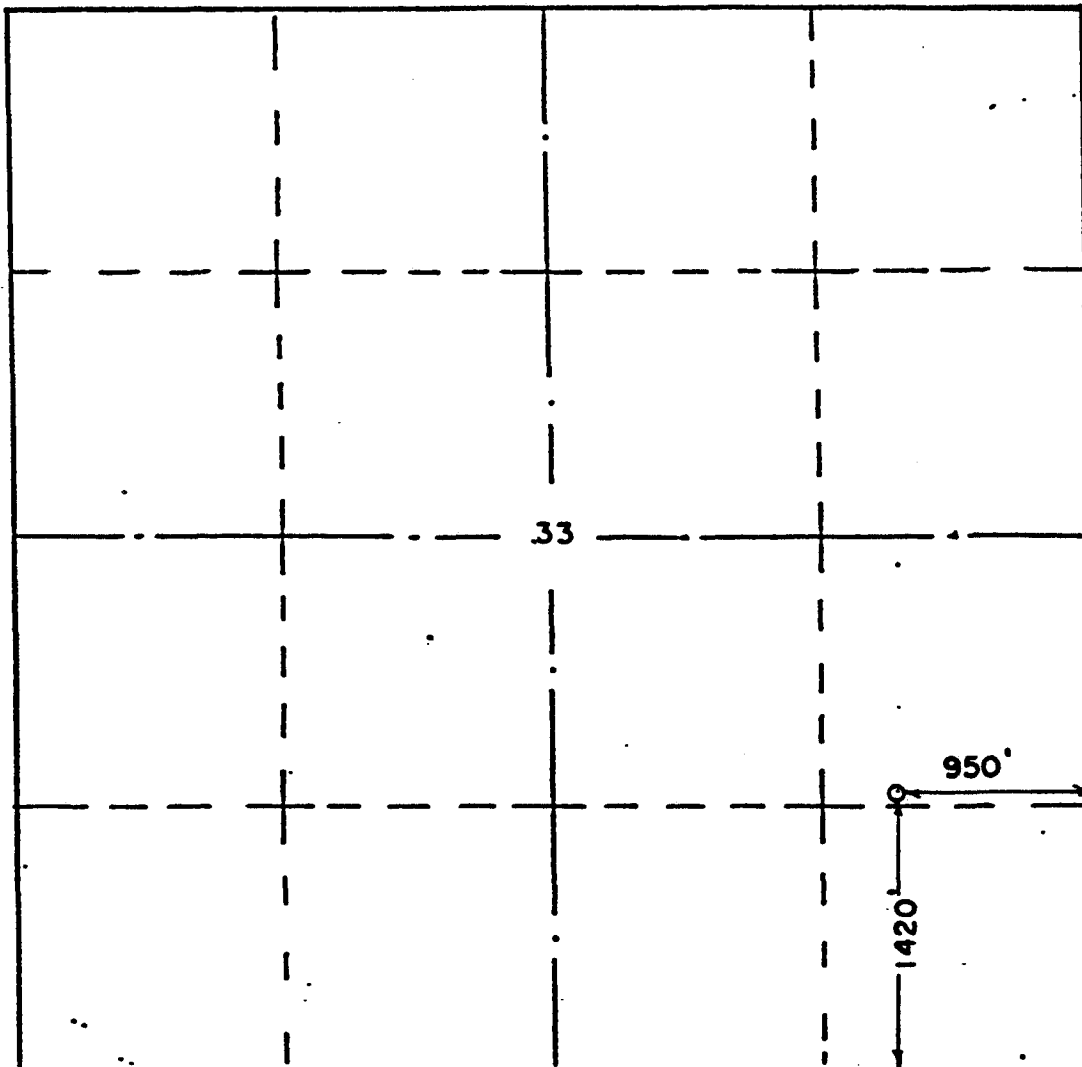
APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

Approved by _____ Title _____
Conditions of approval, if any:

DATE: 7-28-90
BY: John R. Daza
WELL SPACING: _____

*See Instructions On Reverse Side

WELL LOCATION AND ACREAGE DEDICATION PLAT



WELL LOCATION DESCRIPTION:

CHUSKA ENERGY COMPANY, Navajo Canyon 33 - I - 1

1420' FSL & 950' FEL

Section 33, T.39 S., R.25 E., SLM

San Juan, UT.

4867' ground elevation

State plane coordinates from seismic control:

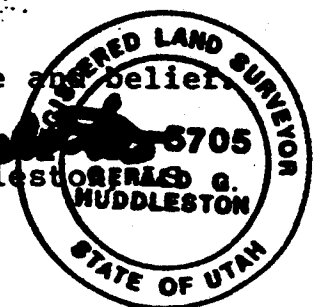
x = 2,676,972

y = 256,890

The above plat is true and correct to my knowledge and belief.

9 July 1990

Gerald G. Huddleston 5705
Gerald G. Huddleston



6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

• NAVAJO CANYON 331-1

CHUSKA ENERGY COMPANY

ACREAGE POSITION UNDER THE 1987 OPERATING AGREEMENT

CHUSKA: T39S-R25E, SAN JUAN COUNTY, UTAH

TEMPORARY

FILING FOR WATER IN THE

STATE OF UTAH

APPLICATIONS TO APPROPRIATE WATER

JUL 05 1990 JUN 29 1990

SALT LAKE WATER RIGHTS PRICE

RECEIVED Rec. by WD
Fee Rec. 30.00
Receipt # 28801
Microfilmed _____
Roll # _____

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements to Title 73, Chapter 3 of the Utah Code Annotated (1953, as amended).

*WATER RIGHT NO. 09 - 1722

*APPLICATION NO. A T64794

1. *PRIORITY OF RIGHT: June 29, 1990 *FILING DATE: June 29, 1990

2. OWNER INFORMATION

Name(s): Chuska Energy Company *Interest: 100 %
Address: P. O. Box 780
City: Farmington State: New Mexico Zip Code: 87499
Is the land owned by the applicant? Yes _____ No x (If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: _____ cfs and/or 18 ac-ft.

4. SOURCE: San Juan River *DRAINAGE: _____
which is tributary to _____
which is tributary to _____

POINT(S) OF DIVERSION: _____ COUNTY: San Juan
At bridge crossing of highway 262 at the city of Montezuma Creek, Utah
S. 350 ft. & E. 1150 ft. from NW Cor. Sec. 5, T41S, R24E, SLB&M

Description of Diverting Works: Water truck and portable pump
*COMMON DESCRIPTION: Montezuma Creek, Utah Montezuma Creek Quad

5. POINT(S) OF REDIVERSION

The water will be rediverted from N/A at a point: _____

Description of Diverting Works: _____

6. POINT(S) OF RETURN

The amount of water consumed will be _____ cfs or 18 ac-ft.
The amount of water returned will be _____ cfs or N/A ac-ft.
The water will be returned to the natural stream/source at a point(s): _____

7. STORAGE

Reservoir Name: N/A Storage Period: from _____ to _____
Capacity: _____ ac-ft. Inundated Area: _____ acres.
Height of dam: _____ feet
Legal description of inundated area by 40 acre tract(s): _____

* These items are to be completed by the Division of Water Rights

TEMPORARY

Appropriate

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Navajo Canyon 331 Well No. 1
Section 33, Township 39S, Range 25E
1420' FSL, 950' FEL
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison

2. ELEVATION

Surface elevation is 4,867' GR.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sub Sea Elevation</u>	
Surface	Morrison	+ 4,867'	
967'	Navajo	+ 3,900'	
1,597'	Chinle	+ 3,270'	
2,707'	DeChelly	+ 2,160'	
2,847'	Organ Rock	+ 2,020'	
3,517'	Cedar Mesa	+ 1,350'	
4,642'	Hermosa	+ 225'	
5,587'	Upper Ismay	- 720'	
5,702'	Lower Ismay	- 835'	
5,777'	Desert Creek	- 910'	Primary Objective
5,957'	Akah	- 1,090'	
6,007'	Total Depth	- 1,140'	

4. PROPOSED CASING/CEMENTING PROGRAM

	<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Coupling</u>
Surface	500'	8 5/8"	24 lb	K-55	STC
Production:	6,007'	5 1/2"	15.5 lb	K-55	STC

Surface Cementing:

371 sx (427 ft³) Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Slurry volume will be calculated at 100% excess over annular volume.

Production Cementing:

First Stage

T.D. to 3,500' (stage collar @ \pm 3,500'). Lead with 178 sx Class 'G' cement, 65:35 Pozmix, with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 445 ft³.

Second Stage

3,500' to surface. Lead with 271 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 616 ft³.

Note: Exact slurry volumes for the production string will be adjusted according to the caliper log which will be run prior to cementing. Special adjustments may be necessary if significant amounts of salt are drilled.

5. BLOWOUT PREVENTER (See attached schematics)

As abnormal pressure is not anticipated, a 2,000 psi BOP system would be sufficient for the drilling of this well. However, due to availability constraints, a 3,000 psi system will be used, as per the attached Exhibits "A" and "B". This will be a 10" x 900 Series double ram preventer, equipped with a set of pipe and blind rams.

An accumulator system, with a pressure capacity sufficient to operate the rams three complete cycles without rig power, will be required as part of the rig equipment.

6. PROPOSED MUD PROGRAM

Surface to 3,500'

Fresh water, gel, lime and native solids. Weight 8.3 - 8.7 ppg. Gel/lime sweeps as necessary for hole cleaning.

3,500' to T.D.

Low solids, non-dispersed polymer system. Weight 8.6 - 9.5 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained at 15 - 20 cc. Fluid loss to be further reduced to 15 cc or less prior to coring, logging or DSTs.

7. AUXILIARY EQUIPMENT

- A. A kelly cock will be installed during drilling operations, with handle available on the rig floor.
- B. Floor (stabbing) valves will be available, on the rig floor at all times, with necessary subs to fit all of the drilling assemblies.
- C. Mud will be the circulating fluid. No abnormal formation pressures are expected.

8. WELL EVALUATION

Open hole electric logging program will consist of a minimum program of DLL-MSFL-SP-GR-Cal, FDC-CNL-GR-Lithodensity from T.D. to 4,500'.

Drill stem testing will be as per the wellsite geologist's recommendations, based on shows. A mud logging unit will be utilized during drilling operations from at least 500' above the Ismay.

9. ABNORMAL PRESSURES/GAS

Abnormal pressures are not anticipated. Monitoring of gas and hydrocarbon shows will be by wellsite mud logging unit. H₂S gas is not anticipated, however regular checks will be made while drilling the well.

10. TIMING

The drilling and evaluation of this well is estimated to be 17 days. Anticipated spud date is 10-15-90.

EXHIBIT "A"
BLOWOUT PREVENTER

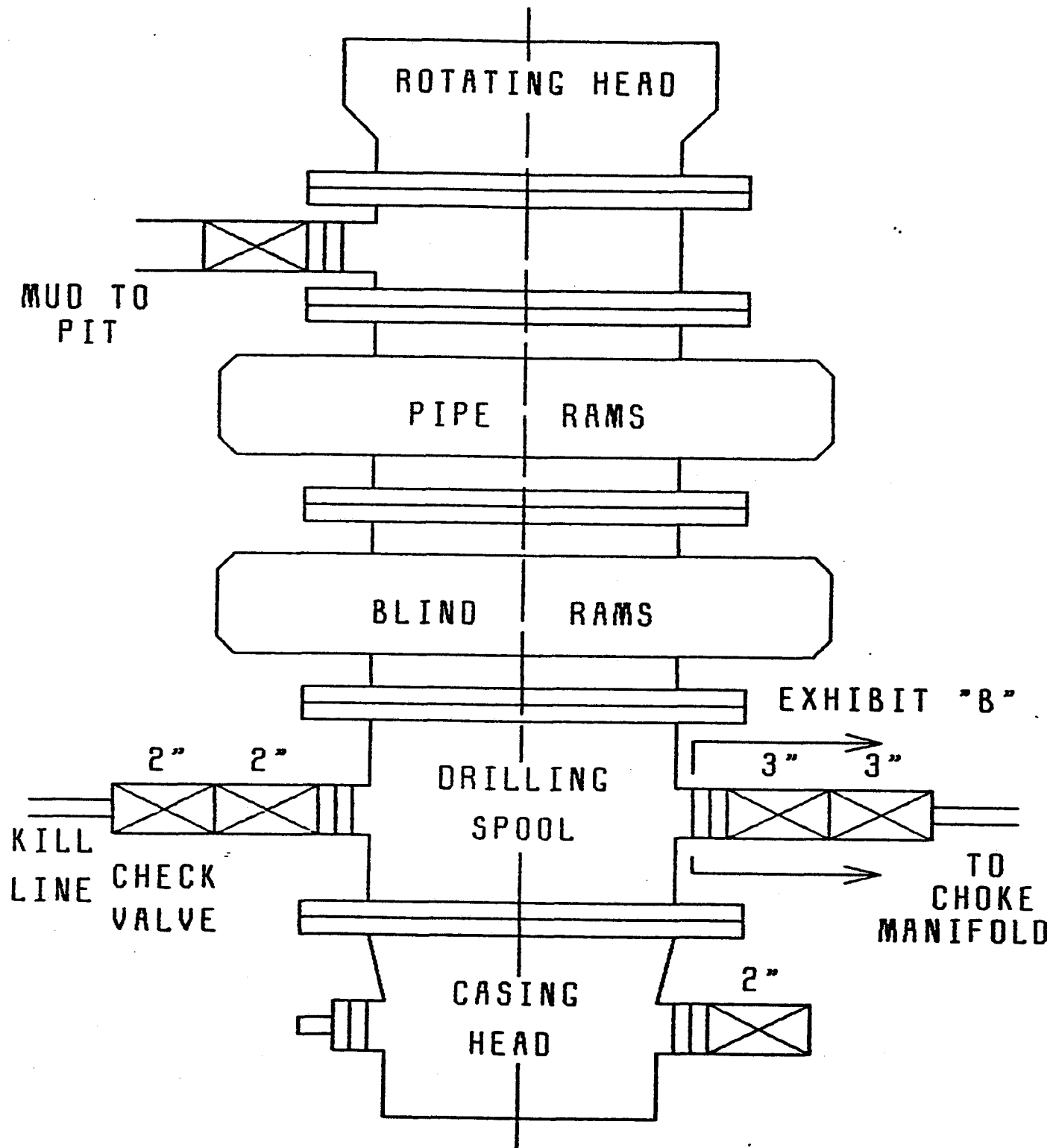
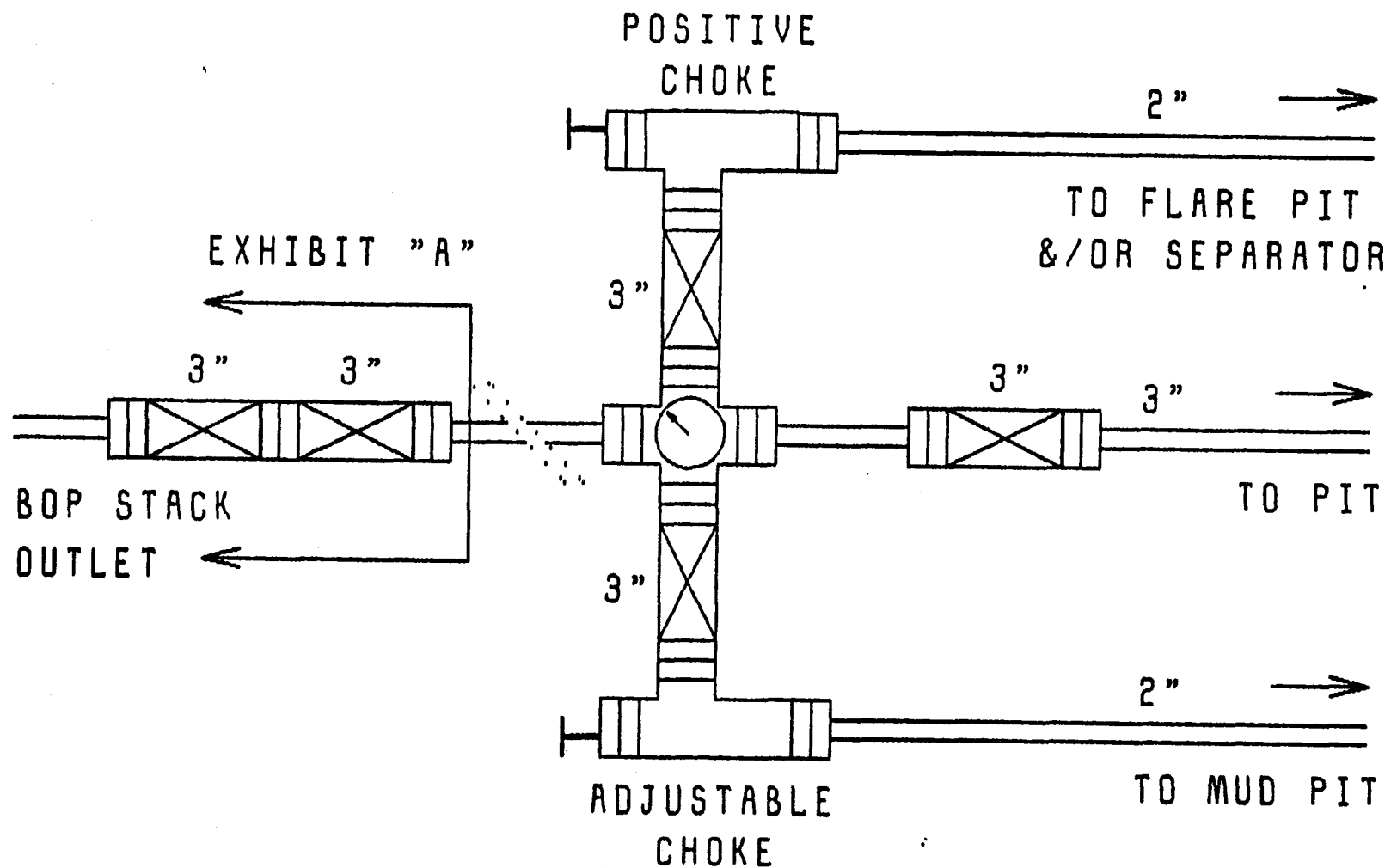


EXHIBIT "B"
CHOKE MANIFOLD



DETAILED DRILLING PROGRAM

DATE: 26 July, 1990

WELL NAME: Navajo Canyon 331 WELL NO.: 1

LOCATION: Section 33, Township 39S, Range 25E
1420' FSL, 950' FEL
San Juan County, Utah

ELEVATION: 4,867' GR

TOTAL DEPTH: 6,007' GR

PROJECTED HORIZON: Primary target is Desert Creek at 5,777'.

DRILLING, CASING AND CEMENTING PROGRAM

1. Move in and rig up rotary tools. Notify BLM of time of spud and intent to run surface casing.
2. Drill mouse hole and rat hole. Mix mud prior to spudding well.
3. Drill 12 1/4" hole to \pm 500'. Use fresh water gel/lime spud mud for drilling surface hole. Well bore inclination is not to exceed 1° at 500'. Deviation surveys will be run at least at 250' and at casing point.
4. Run 8 5/8", 24 lb/ft, K-55, STC casing to T.D. Cement with 371 sx (427 ft³) of Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake (sufficient slurry volume to circulate cement to surface).
5. W.O.C. a minimum of 4 hours prior to nipping up BOP stack and related equipment. See BOP schematics for details.
6. Ensure that plug has been down at least 8 hours prior to commencing pressure testing procedures. Pressure test BOP to 2,000 psig for 30 minutes. Pressure test manifold and all related equipment to 2,000 psig. Pressure test casing to 1,500 psig for 30 min.
7. Drill out surface casing with 7 7/8" bit. Drill 7 7/8" hole to T.D. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first. Maximum allowable deviation will be 5° at T.D., with the maximum allowable rate of change to be 1°/100'.
8. Run open hole logs and evaluate. Drill stem testing will be as per the wellsite geologist's recommendation.

9. If the well is determined to be productive, run 5 1/2", 15.5 lb/ft, K-55, STC casing to T.D. Set stage cementing collar at \pm 3,500'. In addition to placing centralizers over potential production zones, they will also be run to cover the aquifer sands of the Navajo and DeChelly formations, as per BLM stipulations. Cement production casing in two stages as per cementing program in 10-point Drilling Plan.
10. Nipple down BOPE. Set 5 1/2" casing slips and cut off casing. Install well head. Release drilling rig and move rig off location.
11. If well is non-productive it will be plugged and abandoned as per State, BLM and Navajo Tribal stipulations.

Navajo Canyon 331 Well No. 1
Section 33, Township 39S, Range 25E
1420' FSL, 950' FEL
San Juan County, Utah

GENERAL COMPLETION PROCEDURE

If the well is determined to be productive, move in completion rig. Perforate, acidize, and test each productive porosity zone. Completion work will commence after Sundry Notice approval is received. Detailed procedures will follow.

PLUGGING AND ABANDONMENT

If the well is determined not to be productive, the well bore will be plugged as per BLM, State and Navajo Tribal requirements.

Navajo Canyon 331 Well No. 1
Section 33, Township 39S, Range 25E
1420' FSL, 950' FEL
San Juan County, Utah

SURFACE USE PLAN

1. EXISTING ROADS

Shown on the attached topographic map are the existing roads in the immediate area. Outlined is the route to be followed from the Hovenweep road. Existing roads will be maintained, as necessary, while operations are in progress.

2. PLANNED ACCESS ROAD (SHOWN IN RED)

The access road will be as shown on the attached topographic map. The road will be flat bladed, constructed 14' in width and will be maintained as necessary to prevent excessive damage to the existing terrain. The road will be upgraded if commercial production is established. Approximately 1½ miles of new road will be required to be constructed to the location pad, the majority of it along existing seismic lines. This road will also service the proposed SE Navajo Canyon 3C-1 well.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES

There are no other producing wells or facilities in the immediate area.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

No production facilities are presently in place. Should the well prove to be productive, facilities (tank battery etc) will be sited on the drilling location pad.

5. LOCATION & TYPE OF WATER SUPPLY

Water will be acquired from the San Juan River and will be hauled using Chuska Energy Company water trucks, under State of Utah Division of Water Rights Permit Number 09-1722, (T64794).

6. SOURCE OF CONSTRUCTION MATERIALS

The need for additional construction materials is not anticipated. In the event that additional materials are required, they will be acquired either from private sources or with the approval of the Navajo Nation.

7. METHODS OF HANDLING WASTE MATERIAL

Trash will be contained on location in an enclosed bin. It will be hauled to an approved disposal site or burned on location if a burning permit is granted. The reserve pit will be lined, with an approved 7 mil liner, for containing drilling fluids. The pit will also be fenced. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit. Liquid hydrocarbons will be stored in temporary storage tanks and hauled from location to approved sales facilities. The reserve pit will be emptied, back filled and restored to natural terrain status upon completion of drilling operations.

8. ANCILLARY FACILITIES

Chemical portable toilet facilities will be provided on location during drilling and completion operations. No camps or air strips are planned for this well.

9. WELL SITE LAYOUT

Attached is a surveyor's staking plat, cut and fill requirements and a schematic of the proposed rig layout.

10. PLANS FOR RESTORATION OF THE SURFACE

The location is laid out on a south west/north east trend and will require up to 37' of cut in the reserve pit (up to 9' of cut on the southern side of the location pad) and up to 10' of fill on the northern side of the location pad. Top soil removed from the pad will be stored at the well site. The reserve pit will be built on terrain containing sparse native vegetation. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate. All remaining fluid in the pit will be disposed of into an approved disposal site. The reserve pit will remain fenced during the evaporation and disposal process. The pit will then be covered and the topsoil will be returned to the disturbed area. The terrain will be returned as near to its original condition as possible. Following operations, rehabilitation seeding will be in accordance with APD/BLM/BIA stipulations. There are no residents in the immediate area of the site.

11.

OPERATORS REPRESENTATIVE

CHUSKA ENERGY COMPANY
315 NORTH BEHREND AVENUE
FARMINGTON, NEW MEXICO 87401
LARRY G. SESSIONS

12. CERTIFICATION

I hereby certify that either I, or persons under my direct supervision have inspected the proposed drill site and access route: that I am familiar with the conditions which presently exist: that the statements made in this plan are, to the best of my knowledge, true and correct and that the work planned will be performed by Chuska Energy, or its sub-contractors, in conformity with the terms and conditions under which it is approved.


LARRY G. SESSIONS
Operations Manager

CHUSKA ENERGY COMPANY

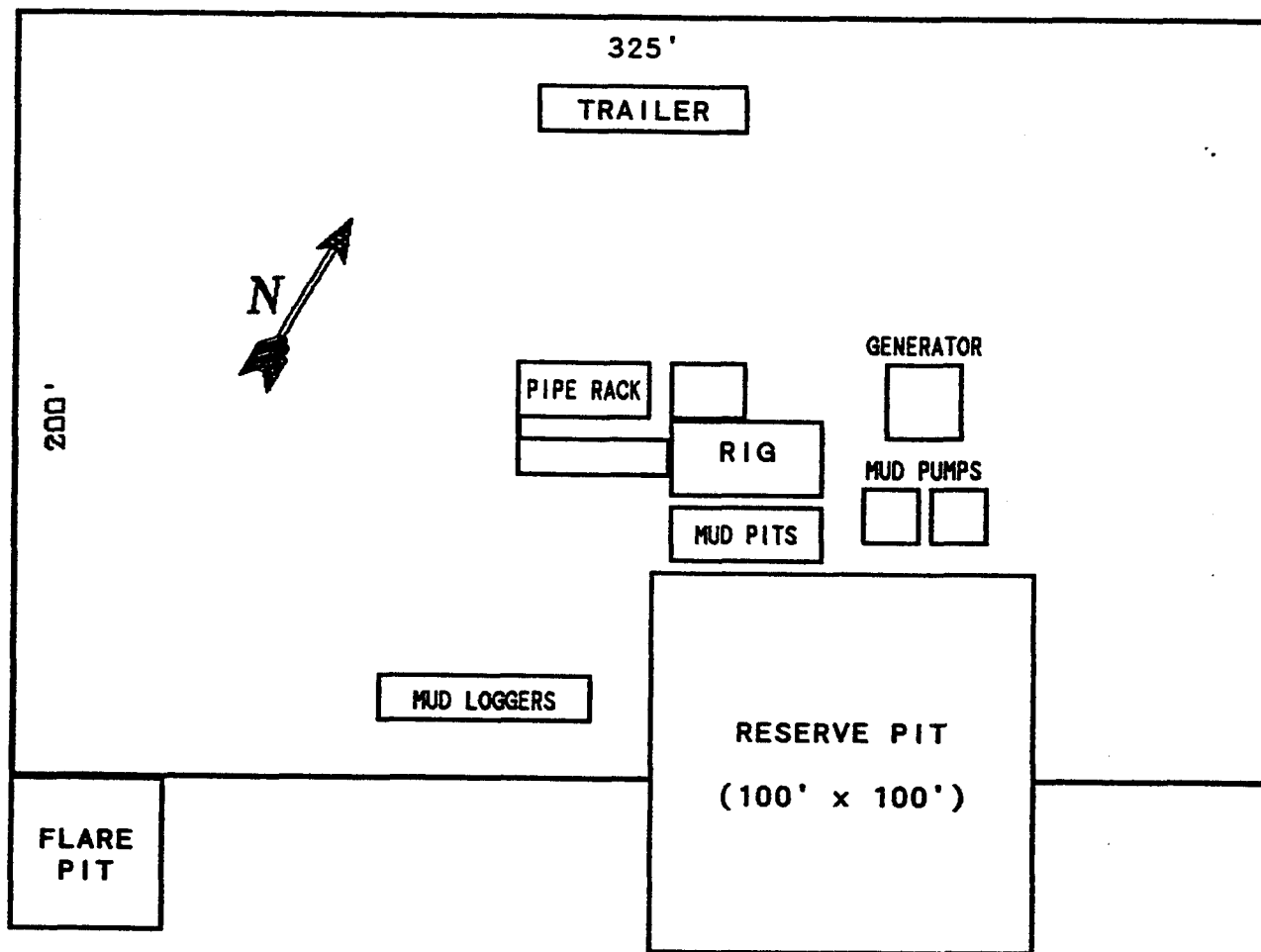
LOCATION LAYOUT

NAVAJO CANYON 331-1

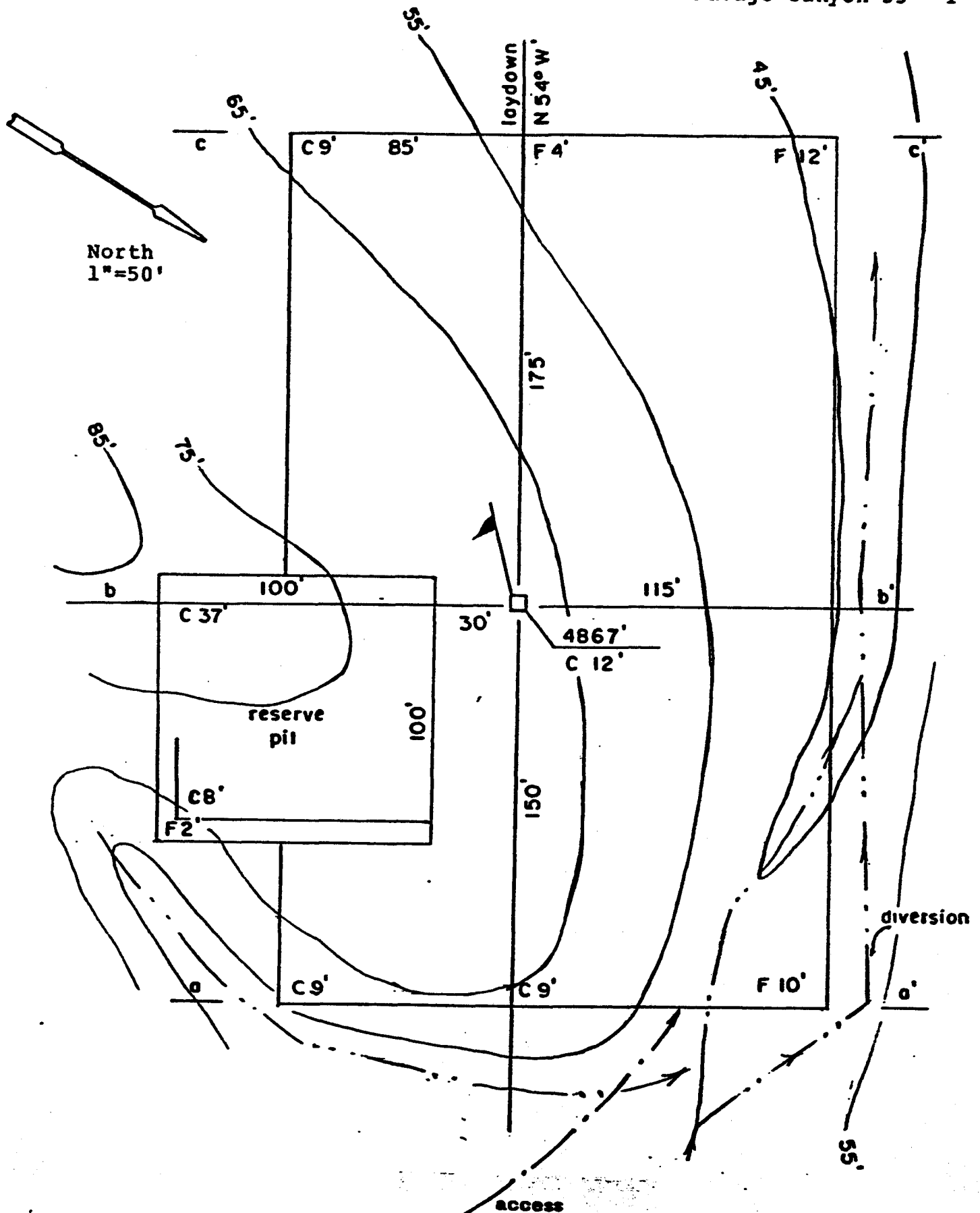
1,420' FSL, 950' FEL

SECTION 33, TOWNSHIP 40S, RANGE 25E

SAN JUAN COUNTY, UTAH





Navajo Canyon 33 - I - 1



Cross Section

Navajo Canyon 33 - I - 1

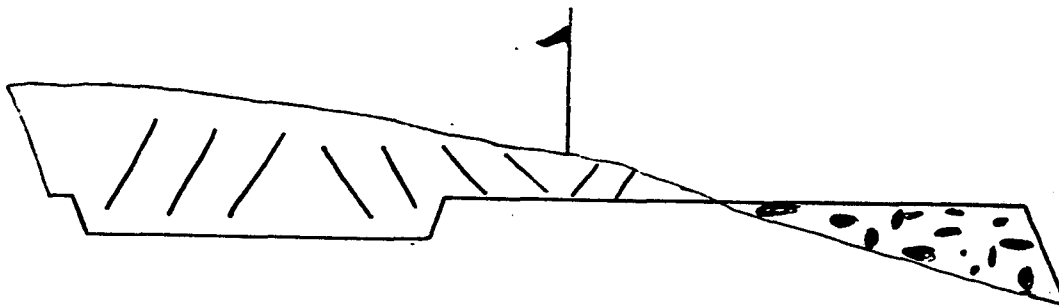
Cut 
Fill 

1"=50' Horz. & Vert.



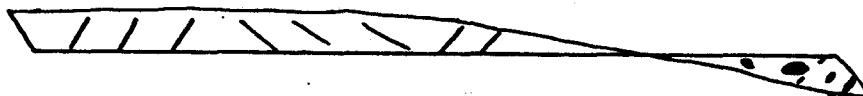
c

c'



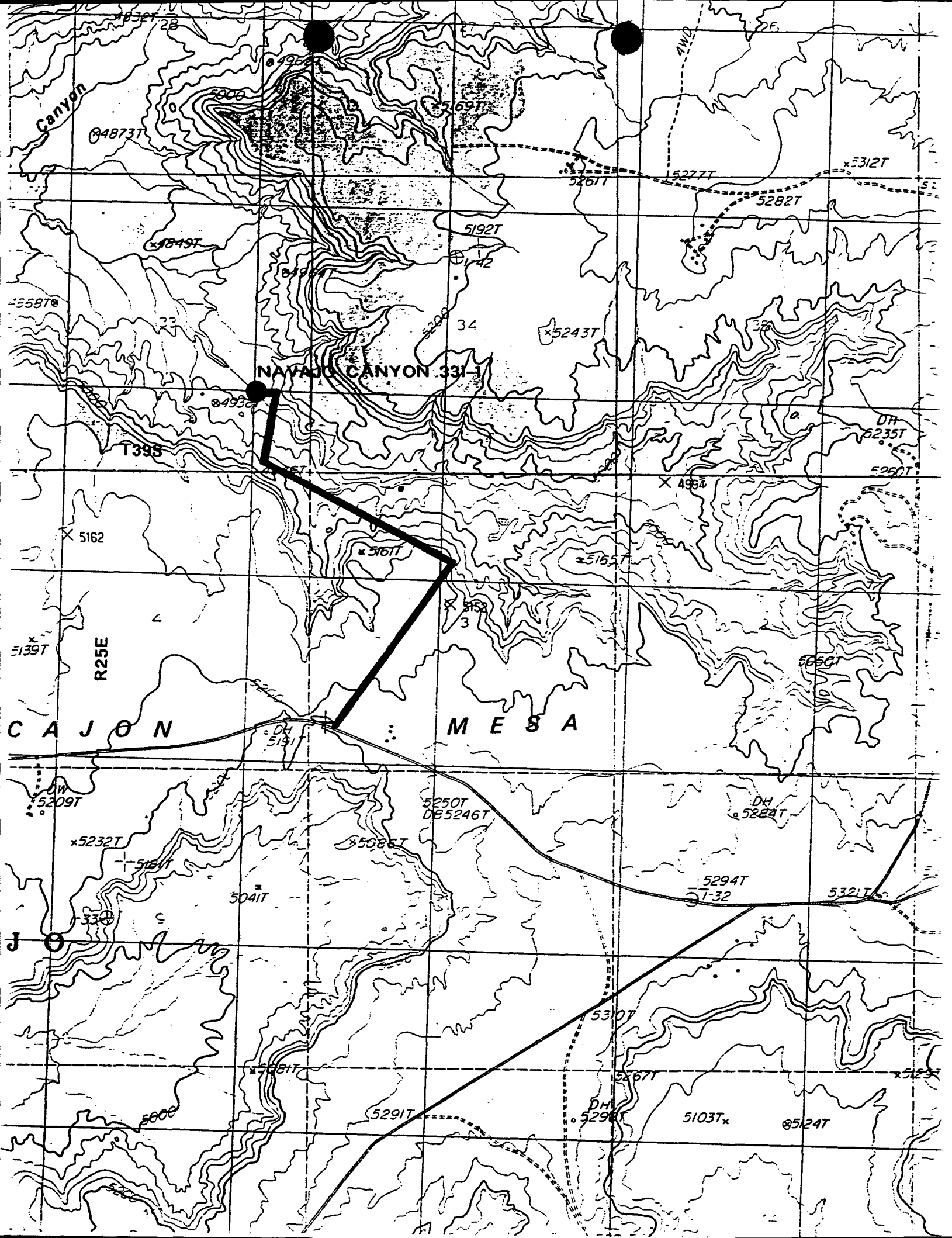
b

b'



a

a'



8. List any other water rights which will supplement this application _____

9. NATURE AND PERIOD OF USE

Irrigation: From _____ to _____
Stockwatering: From _____ to _____
Domestic: From _____ to _____
Municipal: From _____ to _____
Mining: From _____ to _____
Power: From _____ to _____
Other: Oil & Gas Exploration From 8/1990 to 11/1990

10. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
Stockwatering (number and kind): _____
Domestic: _____ Families and/or _____ Persons.
Municipal (name): _____
Mining: _____ Mining District in the _____ Mine.
Ores mined: _____
Power: Plant name: _____ Type: _____ Capacity: _____
Other (describe): Drilling and completion of San Juan County Oil and Gas wells

11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): At drilling sites which are now approved and at sites to be applied for in the future.

NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 5, T41S, R24E, SLB&M

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of the same size if necessary): The point of diversion is on Navajo Tribal lands. Chuska Energy Company, as operator for the Navajo Nation, requires water for drilling and completion operations on Navajo Tribal lands. This application is for a temporary permit to drill and complete six wells.

The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

W. Merle Myers
Signature of Applicant(s)*

*If applicant is a corporation or other organization, signature must be the name of such corporation or organization by its authorized agent, or in the name of the partnership by one of the partners.

Authorized Agent (please print)

Authorized Agent (signature)

TEMPORARY

STATE ENGINEER'S ENDORSEMENT

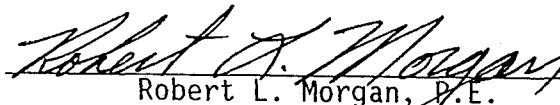
WATER RIGHT NUMBER: 09 - 1722

APPLICATION NO. T64794

1. June 29, 1990 Application received by MP.
 2. July 2, 1990 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-
-

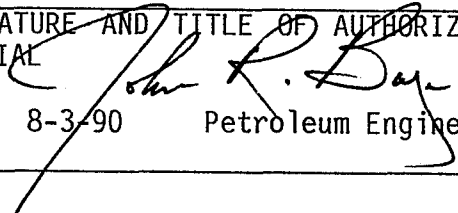
Conditions:

This application is hereby APPROVED, dated July 13, 1990, subject to prior rights and this application will expire on July 13, 1991.


Robert L. Morgan, P.E.
State Engineer

STATE ACTIONS

Mail to:
RDCC Coordinator
116 State Capitol
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY
OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:
(assigned by State Clearinghouse)
3. APPROXIMATE DATE PROJECT WILL START:
October 15, 1990
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:
(to be sent out by agency in block 1)
Southeastern Utah Association of Governments
5. TYPE OF ACTION: ☐ Lease ☒ Permit ☐ License ☐ Land Acquisition
☐ Land Sale ☐ Land Exchange ☐ Other
6. TITLE OF PROPOSED ACTION:
Application for Permit to Drill
7. DESCRIPTION:
Chuska Energy Company proposes to drill a wildcat well, the Navajo Canyon 331 #1, on Navajo Tribal lease number NOG 8702-1116 in San Juan County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S Bureau of Land Management or the Bureau of Indian Affairs is the primary administrative agency in this case and must issue approval to drill before operations can commence.
8. LAND AFFECTED (site location map required) (indicate county)
NE/4, SE/4, Section 33, Township 39 South, Range 25 East, San Juan County, Utah
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
Unknown
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:
No significant impacts are likely to occur
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:
12. FOR FURTHER INFORMATION, CONTACT:
John Baza
PHONE: 538-5340
13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL

DATE: 8-3-90
Petroleum Engineer

WO1186

19090

OPERATOR Chuska Energy Company DATE 8-3-90

WELL NAME Nalajo Canyon 331 #1

SEC N5E 33 T 39S R 05E COUNTY San Juan

43-03T-31546
API NUMBER

Indian (w)
TYPE OF LEASE

CHECK OFF:

☒

PLAT

☒

BOND

☒

NEAREST
WELL

☒

LEASE

☒

FIELD

☒

POTASH OR
OIL SHALE

PROCESSING COMMENTS:

1st Unit Permit 09-1700 (T64794)

RDCC 8-3-90 -

Exception Location

APPROVAL LETTER:

SPACING: ☐ R615-2-3

N/A
UNIT

☐ R615-3-2

☐

N/A
CAUSE NO. & DATE

☒ R615-3-3

STIPULATIONS:

CC: BIA



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

August 28, 1990

Chuska Energy Company
P. O. Box 780
Farmington, New Mexico 87499

Gentlemen:

Re: Navajo Canyon 331 #1 - NE SE Sec. 33, T. 39S, R. 25E - San Juan County, Utah - 1420' FSL, 950' FEL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules.

In addition, the following actions are necessary to fully comply with this approval:

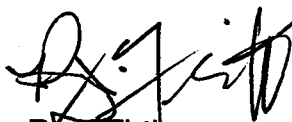
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

Page 2
Chuska Energy Company
Navajo Canyon 331 #1
August 28, 1990

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31546.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

tas
Enclosures
cc: Bureau of Land Management
Bureau of Indian Affairs
J. L. Thompson
WE14/1-10

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31546

DRL

SPODDING INFORMATION

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: NAVAJO CANYON 33I-1

SECTION NESE 33 TOWNSHIP 39S RANGE 25E COUNTY SAN JUAN

DRILLING CONTRACTOR BIRREH CORROSION

RIG # 1

SPODDED: DATE 12-3-90

TIME 10:00 a.m.

How ROTARY

DRILLING WILL COMMENCE _____

REPORTED BY CHRIS HILL

TELEPHONE # 505-326-5525

DATE 12/4/90 SIGNED TAS TAKEN BY: FRM

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

OPERATOR Chuska Energy Company

OPERATOR ACCT. NO. N 9290

ADDRESS P.O. Box 780, Farmington, New Mexico 87499

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11145	43-037-31546 ^{DR}	Navajo Canyon 33I #1	NE/SE	33	39S	25E	San Juan	12-3-90	
<p>WELL 1 COMMENTS:</p> <p>Spudded, with Burge Corrosion Inc. Rig #1 at 1530 hrs, 12-4-90.</p> <p>Indian - Lease Field - Wildcat Unit - N/A</p> <p>Proposed Zone - Akah (New entity 11145 added 12-14-90) <i>lep</i></p>											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

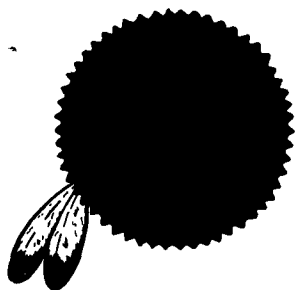
- ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
 - B - Add new well to existing entity (group or unit well)
 - C - Re-assign well from one existing entity to another existing entity
 - D - Re-assign well from one existing entity to a new entity
 - E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.
(3/89)

RECEIVED
DEC 13 1990

DIVISION OF
OIL, GAS & MINING

[Signature]
Signature
Petroleum Engineer
Title
Phone No. (505) 326-5525
Date 12-09



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

10 December, 1990

RECEIVED
DEC 18 1990

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

DIVISION OF
OIL, GAS & MINING

Ref: Sundry Notice: Navajo Canyon 331-1 Well
Spud/Surface Casing

Gentlemen

Attached for your examination and approval is the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,

Larry G. Sessions
Operations Manager

LGS/csw

File: C:\WP51\NAVCANYN.331\SUNCOVER

encl.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.

Use "APPLICATION FOR PERMIT--" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. NOG 8702-1116	
2. NAME OF OPERATOR Chuska Energy Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal	
3. ADDRESS OF OPERATOR P.O. Box 780, Farmington, New Mexico 87499		7. UNIT AGREEMENT NAME Navajo Canyon 33I	
4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations. See also space 17 below.) At surface 1,420' FSL, 950' FEL		8. FARM OR LEASE NAME Navajo Canyon 33I	
At proposed prod. zone Same		9. WELL NO. 1	
14. PERMIT NO. 43-037-31546		10. FIELD AND POOL, OR WILDCAT Wildcat	
15. ELEVATIONS (Show whether DF, RT, GR etc.) 4,867' GR		11. SEC., T., R., N., OR BLK. AND SURVEY OR AREA S33 T39S R25E	
		12. COUNTY OR PARISH San Juan	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) Spud/Surface Casing <input checked="" type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)

APPROX. DATE WORK WILL START

DATE OF COMPLETION 12-7-90

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS: (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

* Must be accompanied by a cement verification report.

Spudded, with Burge Corrosion Inc. Rig #1 at 1530 hrs, 12-4-90. Drilled 12 1/4" hole to 520'. Rigged up and ran 11 joints 8 5/8", 24 lb/ft, K-55, STC casing with guide shoe and float collar. Landed at 456'. Cemented with 400 sx Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake. Circulated cement to surface. Completed cementing 12-7-90.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Petroleum Engineer

DATE 10 December, 1990

(This space for Federal or State office use)

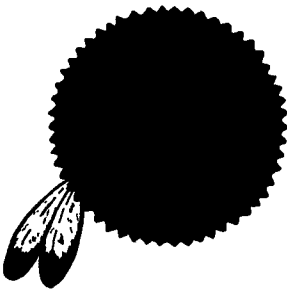
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

RECEIVED
JAN 07 1991

DIVISION OF
OIL, GAS & MINING

4 January, 1991

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

Ref: Sundry Notice: Navajo Canyon 331-1 Well
Production Casing

Gentlemen

Attached for your examination and approval is the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,


Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\NAVCANYN.331\PRCSGSUN.CVR

encl.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT--" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NOG 8702-1116	
2. NAME OF OPERATOR Chuska Energy Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal	
3. ADDRESS OF OPERATOR 3315 Bloomfield Highway, Farmington, New Mexico 87499		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1,420' FSL, 950' FEL		8. FARM OR LEASE NAME Navajo Canyon 331	
At proposed prod. zone Same		9. WELL NO. 1	
14. PERMIT NO. 43-037-31546		10. FIELD AND POOL, OR WILDCAT Wildcat	
15. ELEVATIONS (Show whether OF, RT, GR etc.) 4,867' GR		11. SEC., T., R., N., OR BLK. AND SURVEY OR AREA S33 T39S R25E	
		12. COUNTY OR PARISH San Juan	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		<input type="checkbox"/>

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other) Production Casing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)

APPROX. DATE WORK WILL START

DATE OF COMPLETION 1-3-91

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS: (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

* Must be accompanied by a cement verification report.

Drilled to 5,901' (D)/5,905' (L), TD. Logged. RU and ran 138 joints 5 1/2", 15.5 lb/ft, J-55, LTC casing, with guide shoe, float collar and stage tool, and landed at 5,904'. Cemented as follows:

Stage 1: Lead with 420 sx Class 'G', 65:35 Poz with 6% Gel and 1/4 lb/sk Celloflake. Tail with 285 sx Class 'G' with 0.6% D-60 and 1/4 lb/sk Celloflake. Circulated 35 bbl slurry to pit.

Stage 2: Lead with 805 sx Class 'G', 65:35 poz with 6% Gel and 1/4 lb/sk Celloflake. Tail with 100 sx Class 'G' with 2% CaCl₂ and 1/4 lb/sk Celloflake. Circulated 10 bbl slurry to pit.

Rig released 1500 hrs, 1-3-91.

18. I hereby certify that the foregoing is true and correct

SIGNED

Christopher S.M. Hill

TITLE Petroleum Engineer

DATE 4 January, 1991

(This space for Federal or State office use)

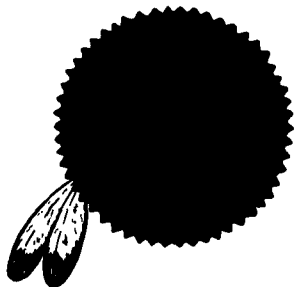
APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

See Instructions On Reverse Side



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

13 February, 1991

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
FEB 19 1991

DIVISION OF
OIL, GAS & MINING

Ref: Completion Report: Navajo Canyon 331-1 Well

Gentlemen

Attached for your examination and approval is the original and two copies of the subject Completion Report.

Please advise if you require additional information concerning this submission.

Sincerely,

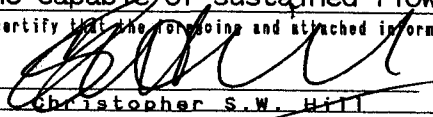
Larry G. Sessions
Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\NAVCANYN.331\CRCOVER

encl.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR <input type="checkbox"/>				5. LEASE DESIGNATION AND SERIAL NO. NOG 8702-1116																															
				6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal																															
2. NAME OF OPERATOR Chuska Energy Company				7. UNIT AGREEMENT NAME Navajo Canyon 331																															
3. ADDRESS OF OPERATOR 3315 Bloomfield Highway, Farmington, New Mexico 87499				8. FARM OR LEASE NAME Navajo Canyon 331																															
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At Surface 1,420' FSL, 950' FEL At top prod. interval reported below Same At total depth Same				9. WELL NO. 1																															
14. API NO. <u>43-037-31546</u> DATE ISSUED <u>8-28-90</u>				10. FIELD AND POOL, OR WILDCAT Wildcat																															
15. DATE SPUNDED <u>12-4-90</u>				11. SEG., T., R., N., OR BLOCK AND SURVEY OR AREA S33 T39S R25E																															
16. DATE T.D. REACHED <u>12-28-90</u>		17. DATE COMPL. (Ready to prod.) <u>2-12-91</u> (Plug & Abd.)		12. COUNTY San Juan																															
18. ELEVATIONS (DF, RKB, RT, GR ETC.) <u>4,867' GR</u>		19. ELEV. CASINGHEAD <u>4,867' GR</u>		13. STATE Utah																															
20. TOTAL DEPTH, ND & <u>5,901' (D)/5,905' (L)</u>		21. PLUG BACK T.D., ND & TVD <u>5,796'</u>		22. IF MULTIPLE COMPL., HOW MANY																															
23. INTERVALS DRILLED BY Rotary		24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (ND AND TVD) 5,789' - 5,772' Desert Creek 5,704' - 5,694' Lower Ismay 5,685' - 5,667' Upper Ismay / 5,660' - 5,625' Upper Ismay		25. WAS DIRECTIONAL SURVEY MADE No																															
26. TYPE ELECTRIC AND OTHER LOGS RUN DLL/MSFL/GR/CAV, LDT/CNT/NGT/GR/CAV BHCS/GR/CAV, MSCT/GR/CAV		27. WAS WELL CORED YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (Submit analysis) DRILL STEM TEST YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> (See reverse side)		28. CASING RECORD (Report all strings set in well)																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CASING SIZE</th> <th>WEIGHT, LB./FT.</th> <th>DEPTH SET (ND)</th> <th>HOLE SIZE</th> <th>CEMENTING RECORD</th> <th>AMOUNT PULLED</th> </tr> </thead> <tbody> <tr> <td>8 5/8"</td> <td>24</td> <td>456</td> <td>12 1/4"</td> <td>400 sx G/2% CaCl₂, Cement to surface</td> <td></td> </tr> <tr> <td>5 1/2"</td> <td>15.5</td> <td>5,904</td> <td>7 7/8"</td> <td>S1: 420 sx G 35:65 Poz/6% Gel + 285 sx G</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>S2: 805 sx G 35:65 Poz/6% Gel + 100 sx G/2% CaCl₂</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>DV tool at 3,507'. 10 bbl slurry to pit</td> <td></td> </tr> </tbody> </table>						CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (ND)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED	8 5/8"	24	456	12 1/4"	400 sx G/2% CaCl ₂ , Cement to surface		5 1/2"	15.5	5,904	7 7/8"	S1: 420 sx G 35:65 Poz/6% Gel + 285 sx G						S2: 805 sx G 35:65 Poz/6% Gel + 100 sx G/2% CaCl ₂						DV tool at 3,507'. 10 bbl slurry to pit	
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (ND)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED																														
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				DV tool at 3,507'. 10 bbl slurry to pit																															
29. LINER RECORD																																			
SIZE	TOP (ND)	BOTTOM (ND)	SACKS CEMENT	SCREEN (ND)																															
30. TUBING RECORD																																			
SIZE	DEPTH SET (ND)	PACKER SET (ND)																																	
2 7/8"	5,633'	5,633'																																	
31. PERFORATION RECORD (Interval, size and number) All perforations 4" casing guns at 4 spf 5,850'-5,825' 100 holes/5,817'-5,808' 36 holes 5,805'-5,798' 28 holes/5,789'-5,772' 68 holes 5,704'-5,694' 40 holes/5,685'-5,667' 72 holes 5,660'-5,625' 140 holes																																			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.																																			
DEPTH INTERVAL (ND)		AMOUNT AND KIND OF MATERIAL USED																																	
5,850'-5,825'		150 gal 7 1/2% HCl/ 7,500 gal 28% MSR-100																																	
5,817'-5,808'		150 gal 7 1/2% HCl/ 2,700 gal 28% MSR-100																																	
5,805'-5,798'		150 gal 7 1/2% HCl/ 2,100 gal 28% MSR-100																																	
See reverse side for remaining acid treatments																																			
33. PRODUCTION																																			
DATE FIRST PRODUCTION 2-1-91		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Swabbing		WELL STATUS (Producing or shut in) Suspended																															
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.																														
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.																														
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)					TEST WITNESSED BY																														
35. LIST OF ATTACHMENTS No zone capable of sustained flow. Suspended pending further evaluation.																																			
35. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records																																			
SIGNED 		TITLE Operations Engineer		DATE 2-13-91																															

See Spaces for Additional Data on Reverse Side

INSTRUCTIONS

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

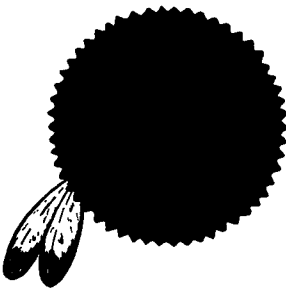
ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.

ITEMS 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or interval(s), top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instructions for items 22 and 24 above).

37. SUMMARY OF POROUS ZONES			38. GEOLOGIC MARKERS		
Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut in pressures, and recoveries.					
Formation	Top	Bottom	Description, contents, etc.	Name	Top
Desert Creek	5850	5825	Dolomite, Limestone. Dry	Hermosa	4584
Desert Creek	5817	5808	Limestone, Dolomite. Dry	Upper Ismay	5536
Desert Creek	5805	5798	Dolomite, Shale. Dry	Hovenweep Shale	5674
Desert Creek	5789	5772	Dolomite, Limestone, Anhydrite, Shale. Swabbed dry	Lower Ismay	5681
Lower Ismay	5704	5694	Limestone, Dolomite, Shale. Swabbed dry	Gothic Shale	5706
Upper Ismay	5685	5667	Limestone, Dolomite, Shale. Swabbed dry	Desert Creek	5724
Upper Ismay	5660	5625	Dolomite, Limestone, Shale, Anhydrite, Chert. Swabbed dry	Chimney Rock Shale	5848
Core #1	5795	5826	Desert Creek: recovered 100%	Akah	5870
Core #2	5826	5858	Desert Creek: recovered 30.3' of 32' cut		
Additional Acid Treatments					
	5789	5772	150 gal 7½% HCl/ 5,100 gal 28% MSR-100		
	5704	5694	150 gal 7½% HCl/ 3,000 gal 28% MSR-100		
	5685	5667	150 gal 7½% HCl/ 5,400 gal 28% MSR-100		
	5660	5625	150 gal 7½% HCl/10,600 gal 28% MSR-100		



CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

20 February, 1991

State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Building, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
FEB 25 1991

DIVISION OF
OIL, GAS & MINING

Ref: Sundry Notice: Navajo Canyon 331-1 Well
First Sale of Oil

Gentlemen

Attached for your examination and approval is the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,

Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\NAVCANYN.331\10ILSUN.CVR

encl.

Form 3160-5
(November 1983)
(formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT--" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. NOG 8702-1116	
2. NAME OF OPERATOR Chuska Energy Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal	
3. ADDRESS OF OPERATOR 3315 Bloomfield Highway, Farmington, New Mexico 87499		7. UNIT AGREEMENT NAME Navajo Canyon 331	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1,420' FSL, 950' FEL		8. FARM OR LEASE NAME Navajo Canyon 331	
		9. WELL NO. 1	
		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., N., OR BLK. AND SURVEY OR AREA S33 T39S R25E	
14. PERMIT NO. 43-037-31546 <i>sow</i>	15. ELEVATIONS (Show whether DF, RT, GR etc.) 4,867' GR	12. COUNTY OR PARISH San Juan	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>First Sale of Oil</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS: (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

First sale of oil from the subject well occurred on 2-20-91. Oil sold was test oil. Well is currently shut in pending further review and evaluation.

18. I hereby certify that the foregoing is true and correct

SIGNED <u>[Signature]</u> (This space for Federal or State office use)	TITLE <u>Operations Engineer</u>	DATE <u>20 February, 1991</u>
APPROVED BY _____	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



CHUSKA ENERGY COMPANY

1775 SHERMAN STREET - SUITE 1800 • DENVER, COLORADO 80203 • PHONE: (303) 863-7021
FAX #: (303) 863-7210

May 17, 1991

Ms. Vicki Kearney
Utah Oil & Gas Commission
355 West North Temple
Three Triad Center
Suite 350
Salt Lake City, Utah
84180-1203

Dear Ms. Kearney:

Please keep all Chuska Energy Company data confidential until further notice.

Thanks,

Herbert P. Mosca
Chuska Staff Geologist

RECEIVED

MAY 20 1991

DIVISION OF
OIL GAS & MINING

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
 355 West North Temple, 3 Triad, Suite 350, Salt Lake City, UT 84180-1203

Page 2 of 3

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

LARRY G SESSIONS
 CHUSKA ENERGY COMPANY
 3315 BLOOMFIELD HWY
 FARMINGTON NM 87401

UTAH ACCOUNT NUMBER: N9290REPORT PERIOD (MONTH/YEAR): 12 / 93AMENDED REPORT ☐ (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entry	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
RUNWAY 10-E #2								
✓4303731550	11128	40S 25E 10	DSCR					
MONUMENT 17E #2								
✓4303731547	11139	40S 25E 17	DSCR					
NAVAJO CANYON 331 #1								
✓4303731546	11145	39S 25E 33	IS-DC					
LONE MOUNTAIN CREEK 12F #1								
✓4303731545	11148	42S 24E 12	DSCR					
RUNWAY 10C-5A								
✓4303731597	11152	40S 25E 10	DSCR					
BLUE HOGAN 1J #1								
✓4303731562	11161	42S 23E 1	DSCR					
ASAZI 5L #3								
✓4303731572	11207	42S 24E 5	PRDX					
NW CAJON 11 #1								
✓4303731510	11210	40S 24E 1	DSCR					
BROWN HOGAN 1A #2								
✓4303731573	11215	42S 23E 2	PRDX					
STERLING 36L #1								
✓4303731595	11224	41S 23E 36	PRDX					
MULE 31-K-1								
✓4303731617	11326	41S 24E 31	DSCR					
NORTH HERON 35C								
✓4303731616	11479	41S 25E 35	DSCR					
BURRO 311								
✓4303731708	11496	41S 24E 31	DSCR	No Cardex / DTS NO FILE		✓ done / OAS		
TOTALS								

COMMENTS:

I hereby certify that this report is true and complete to the best of my knowledge.

Date: _____

Name and Signature: _____

Telephone Number: _____

Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☐ **Well File** _____

☐ **Suspense**
(Return Date) _____
(To - Initials) _____

☒ **Other**
Oper. Nm. Change

(Location) Sec _____ Twp _____ Rng _____
(API No.) _____

1. Date of Phone Call: 2-9-94 Time: 12:29

2. DOGM Employee (name) J. Cordova (Initiated Call ☒)
Talked to:

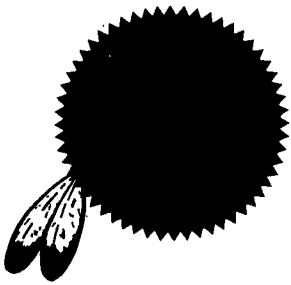
Name Wayne Townsend (Initiated Call ☐) - Phone No. (505) 599-8900
(or Ken Townsend)
of (Company/Organization) Btm / Farmington N.M.

3. Topic of Conversation: Chuska Energy Co. to Harken Southwest Corp.

4. Highlights of Conversation: _____

They have not rec'd doc. of name change. When they do receive doc. they
will most likely keep "Chuska" as operator yet mail any correspondence
% Harken, until BIA approval. (BIA approval may take a while!)

* 940210 Per Admin. OK to change.



HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

We are pleased to announce that effective January 18, 1994, Chuska Energy Company, has changed its name to Harken Southwest Corporation. This is in line with the February 1993 merger with Harken Exploration Company.

Harken Southwest Corporation is still located at 3315 Bloomfield Highway, Farmington, New Mexico, 87401. You may still contact us at (505) 326-5525.

Please reflect this name change as necessary on all future correspondence.

Thank you for your assistance in this matter and we look forward to working with you as Harken Southwest Corporation.

Sincerely,

Barry A. Wieland
Operations Manager

RECEIVED

FEB 07 1994

DIVISION OF
OIL, GAS & MINING

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-EC	7-SJ V
2-DTS	8-FILE
3-VLC	
4-RJE	
5-IEC	
6-PL	

Attach all documentation received by the division regarding this change.
 Initial each listed item when completed. Write N/A if item is not applicable.

- ☐ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☒ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 1-18-94)

TO (new operator) <u>HARKEN SOUTHWEST CORPORATION</u> FROM (former operator) <u>CHUSKA ENERGY COMPANY</u>
(address) <u>3315 BLOOMFIELD HWY</u> (address) <u>3315 BLOOMFIELD HWY</u>
<u>FARMINGTON NM 87401</u> <u>FARMINGTON NM 87401</u>
phone (505) <u>326-5525</u> phone (505) <u>326-5525</u>
account no. <u>N 9290</u> account no. <u>N 9290</u>

Well(s) (attach additional page if needed):

Name: <u>**SEE ATTACHED**</u>	API: <u>037-31546</u>	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- See 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec'd 2-7-94)
- N/A 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form).
- See 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: #096704.
- See 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.
- See 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (2-10-94)
- See 6. Cardex file has been updated for each well listed above. (2-10-94)
- See 7. Well file labels have been updated for each well listed above. (2-10-94)
- See 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission.
- See 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Lee 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- N/A Lee 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
2. A copy of this form has been placed in the new and former operators' bond files.
3. The former operator has requested a release of liability from their bond (yes/no) . Today's date 19 . If yes, division response was made by letter dated 19 .

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A 1. (Rule R615-2-10) The former operator/lessee of any **fee lease** well listed above has been notified by letter dated 19 , of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving **State leases**.

FILMING

- ✓ 1. All attachments to this form have been microfilmed. Date: March 7 1994.

FILING

- Lee 1. Copies of all attachments to this form have been filed in each well file.
- Lee 2. The original of this form and the original attachments have been filed in the Operator Change file.

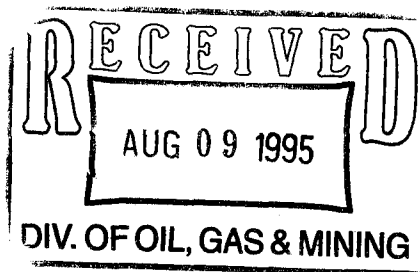
COMMENTS



HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

August 7, 1995



State of Utah
Division of Oil, Gas & Mining
355 West North Temple, 3 Triad
Suite 350
Salt Lake City, Utah 84180-1203

ATTENTION: Don Staley

RE: P&A Wells

Dear Mr. Staley:

Pursuant to our conversation this date, enclosed you will find the following information for your records:

43-037-31711 - N. Heron 35H (A) #1

Sundry Notice - Setting of abandonment plugs

43-037-31546 - Navajo Canyon 33I-1

Completion report as filed by Chuska Energy dated 2/13/91
Sundry Notice - Setting of abandonment plugs

✓ I believe this is all of the information required to remove these wells from Harken's preprinted monthly production report. However, should you find additional data is required, please feel free to contact undersigned. Thank you for your assistance with this matter.

Very truly yours,

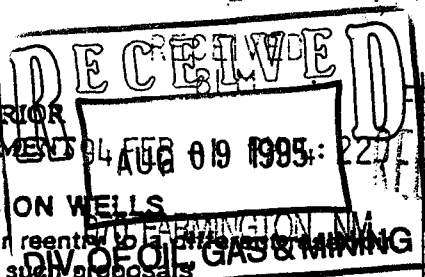
HARKEN SOUTHWEST CORPORATION

Ms. Rachelle Montgomery

/rlm

Enclosures (3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



100 101 112 13 14 15
A
FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993
15. Lease Designation and Serial No.
NCG 8707- 11168

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter to a different formation.
Use "APPLICATION FOR PERMIT—" for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other P&A

2. Name of Operator
Chuska Energy Company

3. Address and Telephone No.
3315 Bloomfield Highway, Farmington, NM 87401 505-326-5525

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1420' FSL & 950' FEL
Section 33-T39S-R25E

6. If Indian, Allottee or Tribe Name
Navajo Tribal
7. If Unit or CA, Agreement Design
N/A
8. Well Name and No.
Navajo Canyon 33I-
9. API Well No.
43-037-31546
10. Field and Pool, or Exploratory Area
Wildcat
11. County or Parish, State
San Juan County, U.

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other P&A
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion
Completion or Recompletion Report and Log)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directional, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Plugging operations commenced on 12/13/93, and were witnessed by Kevin Schneider, BLM. Rig Contractor was Montezuma Well Service Rig #15. All plugs were Class 'B' cement.

PLUG	DEPTH	SXS	FORMATION TOPS
1	5781-5136	143*	Akah, Chimney Rock, Desert Creek (5870-5724)
2	5633-5401	25	Ismay 5536'
3	4637-4478	18	Hermosa 4575'
4	2858-2611	28	DeChelly 2708'
5	1683-1506	20	Chinle 1608'
6	1016-857	18	Navajo 956'
7	508-349	18	Surface Csg Shoe @ 456'
8	95-Surface	15	N/A

*Plug #1: Pumped 73 sx Cl 'B' cement (86.1 ft3, 1.18 ft3/sx). Tagged TOC @ PBTD. Pump additional 70 sx Cl 'B' from 5781-5136. Verify TOC @ 5633' & pressure test to 500 psi, OK.

Approved as to plugging of the well bore.
Liability under bond is retained until
surface restoration is completed.

14. I hereby certify that the foregoing is true and correct

Signed Yough A. Chambers

Title Production Engineer

Date 1/11/94

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any:

Title _____

APPROVED

FEB 07 1994

DISTRICT MANAGER



HARKEN

ENERGY CORPORATION

Rachelle Montgomery
Production Administrator

MacArthur Center II
5605 N. MacArthur Blvd. / Suite 400 / Irving, Texas 75038
P.O. Drawer 612007 / Dallas, Texas 75261
Phone 214-753-6900 / Fax 214-753-6902